

Name of Practice: VOLUNTARY LEGUME BASED COVER CROP
DCR Specifications for No. VWQ-4

This document specifies terms and conditions for the Virginia Department of Conservation and Recreation's voluntary legume cover crop best management practice, that are applicable to all contracts, entered into with respect to that practice.

A. Description and Purpose

This practice will improve water quality by providing an adequate residue cover to prevent erosion and serve as desirable mulch for no-till cultivation. Water quality will also be enhanced by the nitrogen fixation of the legume in order to reduce applied amendments.

B. Policies and Specifications

1. The amount of nitrogen application must be reduced following a pure legume cover crop according to Table 7-1, Estimating Nitrogen Available to Succeeding Crops from Legumes on page 108 of DCR Nutrient Management Standards and Criteria (Revised July 2014).
3. The amount of nitrogen application must be reduced following a mixed species legume cover crop according to the recommendations of a nutrient management plan. A split application of N based upon the results of a PSNT may be applied as well.
4. Removal of the legume residue by baling or by any other means is not allowed. Grazing is not permitted for this practice.
5. **Mulch Cover**
 - i. Existing stands: An adequate (minimum 60% legume cover and stand composition) cover that has been planted for at least one year prior to grain planting. Stand can be composed of clover, lespedeza, vetch or alfalfa. Seed must have been inoculated at time of planting.
 - ii. New stands: A legume cover crop can be planted during the fall prior to grain planting using the following recommendations.

6.

<u>Type</u>	<u>Rate</u>	<u>Seeding Date</u>
Crimson Clover	20 lbs/acre	..... by September 28
..... Except October 12 for the Coastal Plain		
OR		
Crimson clover	(10 lbs/acre)	..... with any single grain or single grass below
1) Annual ryegrass	.....	10.0 lb./acre
2) Rye	.....	1.0 bu./acre
3) Barley	.....	1.0 bu./acre
4) Oats	.....	1.0 bu./acre
OR		
Ladino Clover	(2 lbs/acre)	..... with either
1) Tall Fescue	.....	15.0 lb./acre
2) Orchard grass	.....	10.0 lb./acre
OR		

Austrian Winter Pea 30-40 lbs/acre by October 26

OR

Austrian Winter Pea 15-20 lbs/acre with any single grain or single grass below

1) Annual ryegrass 10.0 lb./acre

2) Rye 1.0 bu./acre

3) Barley 1.0 bu./acre

4) Oats 1.0 bu./acre

OR

Austrian Winter Pea 15-20 lbs/acre with either

1) Tall Fescue 15.0 lb./acre

2) Orchard grass..... 10.0 lb./acre

OR

Hairy Vetch 20 lbs/acre by October 26

OR

Hairy Vetch 10 lbs/acre with any single grain or single grass below

1) Annual ryegrass 10.0 lb./acre

2) Rye 1.0 bu./acre

3) Barley 1.0 bu./acre

4) Oats 1.0 bu./acre

OR

Hairy Vetch 10 lbs/acre with either

1) Tall Fescue 15.0 lb./acre

2) Orchard grass..... 10.0 lb./acre

Vetch is not recommended in rotations containing small grains. It is very important that seeding dates be met to insure adequate fall growth.

i. All seed is required to be inoculated.

ii. Method:

a) No till drill

OR

b) Aerial Seeding

OR

c) Conventionally drilled as long as 30% of previous crop residue remain

OR

d) Broadcast as long as 30% of previously crop residue remain

7. Legume cover crop must be left on surface intact to serve as mulch for the no-till planting of grain crops.
8. Soil loss rates must be computed for all applications.
9. The practice must not be in lifespan from any other conservation program.
10. This practice must be implemented on the fields consistent with NRCS Standards 340 Cover Crops and 590 Nutrient Management. This practice is for use only on land being planted to a grain crop. No till planting must be established into an existing legume stand or newly established legume stand according to the standards of NRCS 329 Residue and Tillage Management, No Till/Strip-Till/Direct Seed, and 340 Cover Crops.
11. The practice may be certified complete once the grain crop has been planted using no-till methods into the legume mulch cover and all applicable specifications listed above have been met.

C. Technical Responsibility

Technical and administrative responsibility is assigned to qualified technical DCR and SWCD staff in consultation, where appropriate and based on the controlling standard, with DCR, Virginia Certified Nutrient Management Planner(s), NRCS, DOF, and VCE. Individuals certifying technical need and technical practice installation shall have appropriate certifications as identified above, and/or Engineering Job Approval Authority (EJAA), for the designed and installed component(s). All practices are subject to spot check procedures and any other quality control measures.

Revised March, 2016

Nitrogen Reduction Form for WQ-4 Certification

District Name: _____

Printed Applicants Name: _____

Applicants Address: _____

Nitrogen Reduction

<u>Fields</u>	<u>Acreage</u>	<u>(lbs/ac)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

I hereby certify that the above information relating to nitrogen reduction from my normal or recommended application rates is true and correct.

_____ (Applicant's Signature)

_____ (date)